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SELECTED MAINTENANCE SKILLS IN THE US ARMY RESERVE--WHY SHORTFALLS EXIST AND WHAT ACTIONS HAVE BEEN TAKEN TO CORRECT THEM

BY

COLONEL CHARLES D. BENSON



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Clearly, current levels of attrition are having a serious impact on MOS qualification rates. What can be done? Reserve commanders must address the root causes of the problem: poor training, delays in receiving pay, transportation difficulties, and job conflicts. How can the Active Component help? TRADOC and FORSCOM have important programs underway to improve MOS qualification including more effective use of Reserve Forces schools and the addition of regional training centers. In its concluding section the essay reviews these and other initiatives.



#### USAWC MILITARY STUDIES PROGRAM PAPEK

SELECTED MAINTENANCE SKILLS IN THE US ARMY RESERVE — WHY SHORTFALLS EXIST AND WHAT ACTIONS HAVE BEEN TAKEN TO CORRECT THEM

An Individual Essay

bу

Colonel Charles D. Benson (Author)

Colonel Robert Holden Project Advisor



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US Army War College Carlisle Barracks, Pennsylvania 17013 23 March 1987

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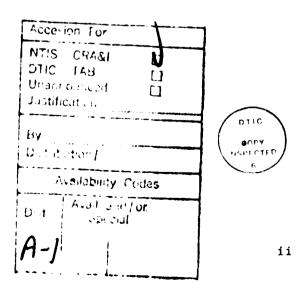
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Clearly, current levels of attrition are having a serious impact on hos qualification rates. What can be done? Reserve contarders must address the root causes of the problem: poor training, delays in receiving pay, transportation difficulties, and job conflicts. Now can the active component help? Thatou and FCESCON have important programs underway to improve FCS qualification including more effective use of Reserve borces schools and the addition of regional training centers. In its concluding section the essay reviews these and other initiatives.



# SELECTED MAINTENANCE SKILLS IN THE US ARMY RESERVE-UNLY SECRETARIES EXIST AND WHAT ACTIONS HAVE BEEN TAKEN TO CORRECT THEM

current retention problems in the Reserve Components have focused stiention on qualification rates for Military Occupational Specialties (MCS). Last year 32% of the United States Army Reserve's (USAL) enlisted personnel chose to leave their units. While extensive recruiting efforts have replaced the losses, units are left with large numbers of untrained privates. In many companies less than 70% of the enlisted are qualified for their job. Recently, the impact of personnel losses on unit readiness, particularly of Coulat Service support (CSS) companies, has prompted public expressions of concern by ferror Army Chief of Staff, Chh. Edward C. Reyer and fermer assistant Secretary of Referse for Reserve Affairs, James Webb. Within the Army Reserve the issue of retention has crowded out other matters.

This essay examines one area of the USAK's logistics capability to determine the extent of personnel shortages and review programs that are underway to fill these vacancies. In the opening portion of the paper, I present data on 12 maintanence specialties: unit positions and the percentage of qualified personnel, individual heady keserve (INE) strengths, and training and mobilization requirements as determined at headquarters, Lepartment of the Army (IA). Subsequently, the essay looks at the personnel status of nine units in cepth, presenting the views of commanders and strength management officers concerning retention ills. The concluding pages review training efforts underway to improve maintenance skills in the USAL.

The extent of the USAR's training problem has been masked by strength figures that show most major commands at or near 100% of authorized strength. In fact strength data vary widely from unit to unit. Among nine companies studied, four exceeded their authorized strength--one company carrying an extra 30 personnel on their roster. At the other end, two units had less than 75% of their required strength. Within these same units, certain specialties fared much better than others; e.g., the 245th Maintenance Company in Wood River, Illinois, has qualified light wheelvehicle mechanics in 10 of 12 required spaces but only 12 of 28 powergenerator equipment repairmen. Acknowledging the wide variances among units, certain facts stand out in reviewing the status of the Army Reserve's maintenance skills. (See Appendix 1.) First, USAR units are unable to fill these MOS to required levels except for light wheel-vehicle mechanics and equipment records and parts specialists. Secondly, only about twothirds of those individuals serving in maintenance positions are actually qualified. Adding all USAR units together, one of the twelve specialties shows a qualfication rate about 70%; half of the MOS fall below 50%.2

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While the figures give a bleak picture of individual training readiness, there is a solution at hand. In ten of the twelve MOS, there are more than enough Individual Ready Reservists (IRR) to fill unit vacancies. Power-generator mechanics and chemical-equipment repairmen (52D and 63J) remain a problem even with IRR assets applied. In the other specialties available reservists exceed unit requirements. But other requirements will compete for the IRR pool including active and mobilized Guard units, as well as casualty replacements.

Judged in the context of the Army's overall personnel needs, how critical are these particular NOS shortages? Only one of the twelve --power-generator repairmen -- ranked near the top of the level 1 priority list prepared by the DA Deputy Chief of Staff for Operations (PCSCES). It came in fourth of 220 NCS with a requirement to train 868 ready reservists in 1987. When you consider that only 18,000 IEE enlisted were trained in 1986, the size of the allocation gains significance. In fact 520's received the largest number of training quotas. Three other maintenance skills from the study made the "top-fifty" list including light wheel-vehicle mechanics (skill levels 2 and 3), utility equipment repairmen, and track vehicle repairmen. The LCSCES list emphasizes the importance of the USAE's logistics functions for the Army; among the 50 NOS with the highest training priority, 42 were medical or CSS skills. 4

A Le leputy Chief of Steff for Personnel (LCSPER) study projecting manpower shortages 90 days after a mobilization provides a second assessment of USAR manpower. Understandably, combat NOS require the largest numbers in anticipation of casualty replacements. Among the 12 maintenance skills, only three present a serious deficit numerically: power generator repairmen with a shortfall of 3210, Qh and chemical equipment—1276, and wheel vehicle repairmen—930. Two low-density NOS are also significant—the utilities equipment repair specialty has a deficit of 107 and fuel and electrical systems a slortage of 270. According to the LCSPER report, the other seven NOS should be at satisfactory levels 90 days into the war.

what generalizations can be drawn from these data? First, maintenance units of the Army Reserve have a serious shortage of qualified personnel.

In hard-skill areas, such as the twelve singled out for this paper, the qualification rate runs about 50%. This situation exists at a time when other UtAI specialties show a surplus in assigned personnel. Among six MCS selected at random (infantrymen - 11 P & C, combat engineers - 12), tactical communications operator - 31V, tank crewman - 151, bridge crewman -126), five are overstrength. MCS qualification rates are correspondingly higher. Secondly, IEE assets provide a source of personnel for most of these vacancies. Third, because of greater shortages in other logistics and redical skills, these 12 maintenance NCS are not among the Army's highest training priorities. The LA staff agrees that we need more repairmen for power generators (52L), utilities equipment (52C), and fuel and electrical systems (630). Depend that, LCSOPS recommends more training for light wheel-vehicle mechanics to redress an inhalance at the 20 and 30 skill levels. LCSFLL's stucy also recognizes the overall shortage of regainsen for () and chemical equipment (63). But what do these data mean ir terms of unit readiness? In the next section nine units are examined in some detail.

haintenance units in the St. Louis area come under the 520th haintenance lattalion of the 102nd Arry Leserve Cormano (ALCOL). At first glance
the 102nd's strength figures look good. On 30 September 1986 the ALCOL's
enlisted ranks stood at 108% of authorized strength, having grown by hearly
500 in the previous year. In the same period, however, the command was
experiencing a 35% attrition rate. Of the 1,980 LL leaving the ALCOL last
year, 510 transferred to another beserve Component unit or opted for active
duty. Approximately the same number requested transfer to the 1kL; another

500 were listed as unsatisfactory participants, as they rissed nine or more drills during the year. About half of the remainder chose not to reenlist. Letting aside the first group (those who transferred to another Army component or command), the ARCCH's attrition rate was about 25%. Why did 1470 enlisted personnel chose to leave the 102nd ARCCH last year? lour reasons were most often cited: poor training, delays in receiving pay, transportation difficulties (the service member lived outside a 50-mile radius or had no vehicle), and job conflicts -- the unit atfiliation took up too many hours or weekends. Major Lenis Tappella, strength management officer for the ARCCH, offers a fifth reason: olligated service members can quit without fear of punishment. Whatever the reasons, matters have not improved much in 1987. The first quarter saw ARCCH losses of 485 enlisted, an arnual attrition rate of 52%.

within the 520th Laintenance lattalion, there are six detachients and three corparies. Of the latter units two slow a marginally satisfactory status of qualified personnel, albeit with serious problems in several hard shills. The third is a company in name only. The 424th Light Equipment Laintenance (LLE) Company of St. Charles, hissouri, legan operations a year ago and has yet to get on its feet. At 48% of authorized strength, the unit has only one-quarter of its positions filled with a qualified incividual. Typically new units in the army beserve take several years to gain community recognition and full strength. The 245th (St. Louis) and the \$36th Laintenance Companies (Wood Liver, Illinois) are representative of many that logistics units: at 100% strength, with an NCS qualification rate around 75%, and hard-skill levels closer to 50%. The equipment

concentration site at lort rechard kook, hissouri, provides the dest reads to train, but involves a three-hour drive from it. Reuls. Riseatts feether with weekend training and job conflicts are the two reasons cost effective given by those leaving the unit.

The qualification figures for the three greater - St. Loois wills present a star; contrast to the AKCL's overall strength of ACL. is the 5t. Louis Fectuiting Lattlion at fault for not matching new enlistees against unit requirements? The Army Leserve enlistment sergeant in it. Louis makes a good case for his tattalion. In discussing assignments with perspective recruits, the first consideration is peoplayly. In a retrocolitar area like St. Louis, a typical recruit has limited assess to transportation. Vacancies in subtrlar Lt. Charles to unfilled because there is no bus service from other parts of St. Louis are daily recruits lave no car. A second consideration is test scores -- many applicants simply on not show the aptitude for maintenance specialifes. Finally, the incividual's desires are taken into account. Since the army wants a long-term conditions, the Accounting Lattalian tries to accountable the young person's wishes. While heserve Corponents units ejeate unit vacarev lists quarterly, the recruiters appear to use these printouts as a secondary tool. Their primary goal is to meet enlistment quotas. If they fall critical shortages in hard-skill specialties, then all the better.

At the adjenont like Genter, 20 miles west or downtown Hilacelphia, CFT hark hudson wrestles with training problems similar to those of his peers in the 102nd akcc: In 1986 Company 2, 257th Support Eattalier, lest 33% of its enlisted members. (Ludson is quick to point out that his

attrition rate was 15% below the 157th Infantry Frigace's average.) Although the company's strength is above 50%, barely half of the enlisted are 10% qualified. Currently, 25 members of the unit are attending or awaiting initial entry training; a like number are listed as pending leases. What accounts for the brigade's poor retention? Budson cites streng dissatisfaction with annual training. For two summers the brigade has undergone regorous nor-stop field duty at fort Pickett, Virginia, with our errors defections at the following crill. The reasons listed by the 102rd ARCO: -- training, pay procedures, transportation problems -- apply equally well to Lagenont. Since all equipment is maintained by a civilian centractor, the unit must reserve vehicles and generators for weekend relaterance. Part (ideance units in the Hiladelphia-Laltimore area send personne' to aberdoes however participates as little as possible, arguing that not activities were against unit ochesion.

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The MOS qualifications rate for the 298th Laintenance company in Altoona, Fennsylvania, took a nosedive in hard-1986 when a 1664 change increased unit strength from 131 to 187. The area recruiting office, reduced from three recruiters to one MCO about the same time, has been hard pressed to fill the unit's attrition losses of 27%, much less find 56 additional servicemen. The shortage is particularly acute in 521, a specialty that doubled in numbers lest year. Training opportunities are available at Tobylanna bejot for 520s and 521s as well as electronics repairmen. At Indiantown Cap the regional maintenance training center provides training for 635's, Although the degreesed economy in Altoona stimulates enlistments, the unit loses many of its members to active duty or unit transfers. 11

beveral conditions contribute to the satisfactory training levels of the 32fth haintenance battalion in Unings Mills, Maryland. The first is geographic: the tattalion's three companies draw on the large population of metropolitan baltimore for recruits. Ferhaps more importantly, the three units are within an hour's drive of the Ordrance School at aberdeen browing Ground where they receive MoS instruction and recruit maintenance personnel from active outy. A second advantage is continuity — the three have not changed their organization or location for the just ten years. Third, the battalion jursues a conscious policy of everfilling its ranks. Since 1984 the 816th Maintenance Company (Ft. Leace) has averaged 1927 of its authorized strength; the units in testmineter and magerstown have done nearly as well. The overstrength has helped the three units maintain not qualification levels of 75% to 96%, even though one-quarter of their Libbaro not trained for their duty assignment. 12

The status of enlisted personnel in the rine units supports several conclusions. First, the unit data mirror the figures in the LAKC-27 report (Appendix 1) which show that 25% to 40% of enlisted members are unqualified. (The hard skills are generally found near the upper limit of that range.) What conditions cause such a high percentage of untrained personnel? The answer lies largely with the USAL's attrition rate of 32%. Then why such a high rate? It comes down to a lack of contituent among young service members, no practical way to enforce the service obligation, and inadequate training facilities -- compounded by poor utilization of what is available. A second conclusion emanates from the first: four ci the nire units fall vell short of mobilization readiness. With less than 50% of their EL. qualified, these units can perform, perlaps, half of their intended workload. (A larger survey of Quard and Leserve service support units, undertaken by the Office of the Assistant Secretary of the army for installations and logistics, procuced similar functions.) limitly, satisfactory levels of 1.00 qualifications are possible with: one, an appressive recruiting cattaign to overfill trits by 10% to 20% of erlisted strength, two, proximity to good training facilities; and three, stability in organitation and location.

This essay's concluding section reviews arry efforts to improve the qualification levels in the reserve Components. The Legarthent of the army's current "action flan for neserve Components Training" identifies at issues, including rayor initiatives to improve all training thru neserve Forces schools and regional training centers. Fefore looking at these issues in some detail, two recent actions variant notice. Intil recently

NCC training in the Reserve Components has concentrated on developing leadership to the neglect of MCS-specific skills. Last fall the Training and Loctrine Command (TRADOC) moved to correct this situation by adding LOD-related instruction to its reserve LCC courses. Service schools have been tasked to incorporate technical training (skill level 2-4) into MCC courses, where appropriate, by 1990. A second action concerned the retraining of prior service enlistees. Civen the limited number of Reserve Components units in most areas, incividuals with prior service are usually malassigned. Defore 1986 efforts to retrain these individuals at service schools set with little success. Last year, however, in-service recruiters began producting the Prior Service Training Program with increased vigor. As a result 1260 if qualified for at LCS in their new reserve duty assignment, a rarked increase over previous years. Program funding for the future has been assured through the addition of a discrete line item in the 116 budget.

Not years reserve units have qualified service rembers through supervised on-the-job training (2007) when no other way seemed available. Never satisfied with this route, TRALCO further restricted its use with the Vice Chief's approval in our 1986. New rules prohibit the qualification of enlisted solely by 2007, dictating that certification programs include sone formal training. Army guidance further precludes the use of 2007 where reserve forces school programs are available. Finally TrALCO has taken important steps to improve the quality of instruction presented by reserve forces schools. An affiliation program linking each army service school with a half-dozen reserve forces schools provides the means to supervise

training. Service schools will conduct semiannual visits, render evaluations at annual training, and provide technical support throughout the year. The addition of 1475 paid crill spaces has allowed the Leserve Forces schools to expand their curriculum and exercise nore flexibility in their offerings. 14

Tull implementation of the affiliation plan has been delayed by a lack of funds. At this time service schools are straining to conduct annual visits. The program's potential is evicent, however, in the work of the 2076th Reserve Forces school (Wilmington, Lelavare). The 2076th has the good fortune to conduct its instruction at Aberdeen lrov ing Cround, Its affiliation with the Ordnance school formalizes a working relationship that dates back to 1978. Tast fall 471 enlisted enrolled in one of the school's hus programs, either to gain or sustain a military shill. Since October the monthly drills have attracted an average of 315 students. Unit personnel arrive on Friday evening and classes end at noon Lunday, after 12 hours of instruction. Students cone from as far away as New York City. (The 102nd Laintenance Company of Erooklyn has 68 of its Lt. enrolled.) Obviously, Fennsylvania and Laryland units are rajor partici-The 2076th provides instruction in the 44, 45 and 65 series of military specialties -- typically the individual must attend two addedic years ((ctoler thro lay) and two periods of annual training (14 days) to earn the MCC. Students can miss one Aberdeen session per year with rake-up training at their LSAL center. having run raintenance NOS classes for years, the 2076th has a strong cadre of instructors. When they need administrative or technical support, the Granance school lends a hand. 15

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As I indicated earlier, the lack of training areas is a major cause of the keserve Component's high attrition rate. In the past two years forces Command has made this problem its second highest training priority, just below the National Training Center. With funds identified in the 1987-91 PON, FORSCOL intends to activate 19 sites for combined arms training. In the same timeframe, the National Cuard Lureau expects to acquire 19 similar facilities. 16

In support of combat service support training, FCRSCO, and the Cuard Eureau are joining with TRADCO and the Army Naterial Command to establish 23 regional maintenance training sites. These sites will provide transition training on force-nocernization equipment and the opportunity to refresh military skills, i.e., sustain rather than award NCS's. The maintenance site at Fort Indiantovn Cap, lennsylvania (HC) is among the carliest in operation, having stated up in september 1986. On a typical weekend HC hosts 50 to 75 reservists. Of the five-man team at the site, only one is listed as a trainer. He assists unit personnel, while they take the lead in the weekend's activities. Although the cap has limited equipment — generators, signal equipment, and an LHC personnel carrier, the opportunity is there for good training. 17

Reserve forces schools and the Prior Service Training Irogram add significant numbers to the ranks of qualified reservists. If all 51 schools approached the success of the 2076th, USAR units would add 10,000 qualified enlisted per year. PSTI has the potential to further increase that sum by 1,500 to 2,000. The ultimate solution, however, is to improve

retention. En attrition rate of 33% lest year translated to a loss of over 70,000 service centers. Until that number comes cown, that units will show unsatisfactory levels of hos qualification.

USAR UNIT PERSONNEL REQUIREMENTS

APPENDIZ 1

<u>NOS</u> 443	Required 824	1:01:med 761	2nte	<u>unalified</u>	
Metal Worker	V. E. T	101	<b>-•</b> 1,7		- ","
NAE Machinist	625	727	20.1%	7. <b>7</b>	C= ;;
45K Tank Turret	214	142	56.4%	24	40%
Arty. Repair	σŝ	72	73.5%	4-5	47.0
520 Utilities Equip. Repair	790	<b>63</b> 4	€6 <b>.</b> 6%	1.1 5	58.3
SED Power Gen.Equip. Renair	3413	2790	70.0%	1,50%	4.90á
633 Light wheel Veh.	7202	8 49	477.44	3007	87.
673 Fuel& Elec.3ys	235	169	74.03	98	423
67H Trock Veh.Royair	1305	-142	86.2%	697	57.4
67J gN 2 Chem. Equip Remain	1317		√ <b>.</b>	1,**L	₹€.á
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750 Enuip.Rec. &Parta Specialist	7 <b>.7</b> 3		• •	ņn:	65.4
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